

NCR-19-7648



Dart Aerospace Ltd.
1270 Aberdeen St
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K6A 1K7
Canada

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RB6872533-1
Job Sheet 197092



Part No: RB6872533-1

Job Qty: 2 pcs

Part Name: Handle



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/28/19

Job Tracking No:

Due Date: 8/10/19

Created By: Kimberley Guerin

Type: SOLD

Description:

Note: DWG.RB6872533 Rev A IPP Rev. A 19.06.27 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet - Omax - 1	2 pcs		8/10/19	0.17	0.20	Waterjet - Omax		DL 19/07/11
110	QC 2	2 pcs		8/10/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		DL 19/07/11
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		



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Container No: S197516



Part: RB6872533-1

Job No: 197092

Serial No/Batch: S197516

Revision: A

Inspector:

Exp Date:

Instructions:

Date: 07/26/19

Plex 6/28/19 9:13 AM Dart.Guerin.Kimberley

120 QC 8	2 pcs	8/10/19	0.00 0.00	QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	JUL 12 2019 40
				QC 8 - 52	9-89
				QC 8 - 23	
				QC 8 - 57	
130 Large Fab - Welded Assy-2-B4B	2 pcs	8/10/19	0.00 0.50	Large Fab - 1 - B4B	
				Large Fab - 10 - B4B	
				Large Fab - 2 - B4B	
				Large Fab - 3 - B4B	
				Large Fab - 4 - B4B	
				Large Fab - 5 - B4B	
				Large Fab - 6 - B4B	
				Large Fab - 7 - B4B	
				Large Fab - 8 - B4B	
				Large Fab - 9 - B4B	
				Large Fab - 11 - B4B (Various)	
140 QC 5	2 pcs	8/10/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	JUL 26 2019 40
					9-89

6/28/2019

[Dart Hawkesbury] Job Sheet - Guerin, Kimberley

150	Packaging 3-1 - Stock - B4B	2 pcs	8/10/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	DAS
					Packaging 3 - 5 - B4B	28
					Packaging 3 - 6 - B4B	9-89
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	DAS
160	QC 21 - SA	2 pcs	8/10/19	0.00 0.00	QC 21 - SA - 21	DAS 21
					QC 21 - SA - 70	9-89
					QC 21 - SA - 53	

Part Op 100 - 1-Cut as per DWG. DWG. Rev: A PROG. Rev: A RED BARN folder 2-Debur if necessary
 Descriptions: 130 - Heat and form as per drawing.

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-S-0.250	AISI 4140 / 4142 Steel Sheet 0.250"W	.1980 sf (.099 ea)	100-Waterjet - Omax - 1	5089796

Job Allocations

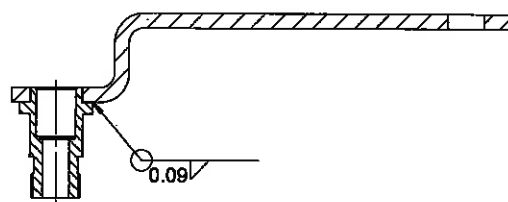
Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Omax - 1	MT-4140-S-0.250	0	12	0

Part Specifications

Specifications could not be found.

Plex 6/28/19 9:13 AM Dart.Guerin.Kimberley

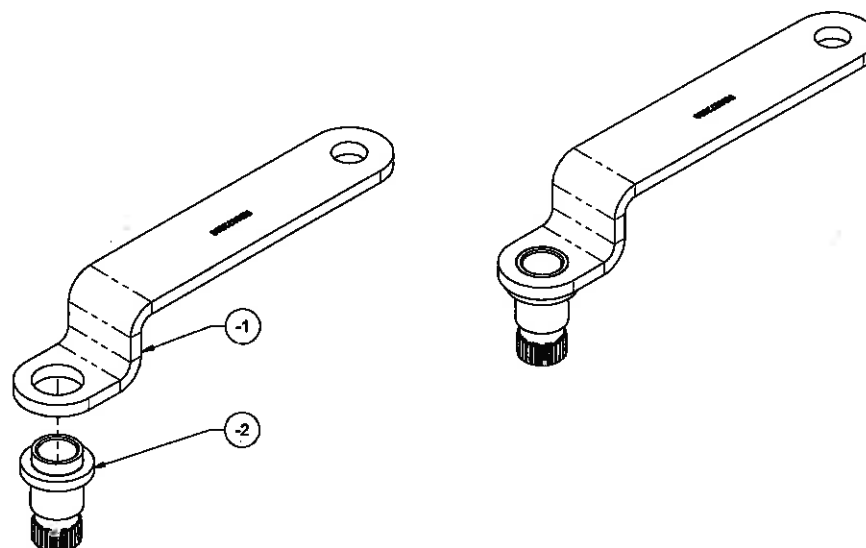
ITEM #	QTY	PART #	PART TITLE
-1	1	RB6872533-1	HANDLE
-2	1	RB6872533-2	WRENCH



SECTION A-A

RB6872533 WRENCH AND HOLDER INST/REM COMPRESSOR TIE BOLT

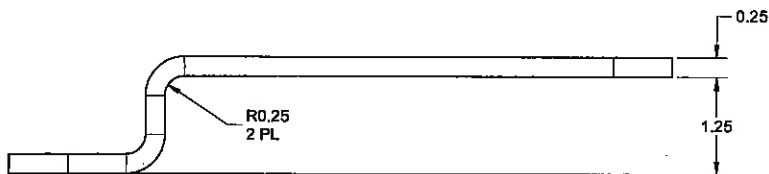
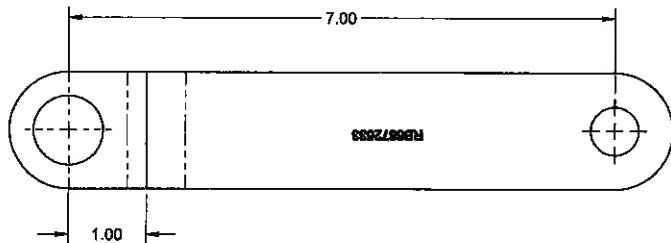
9



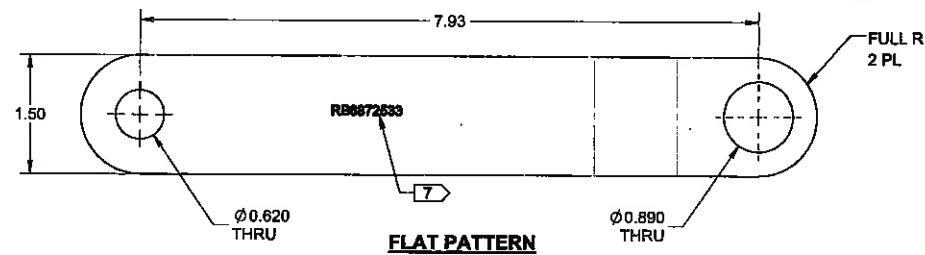
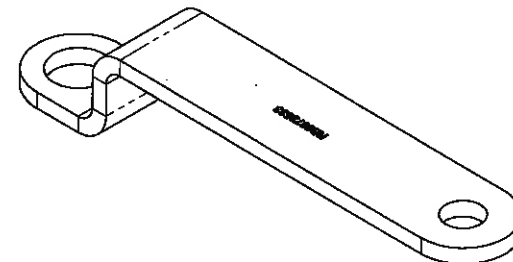
NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: BLACK OXIDE PER MIL-C-13824 CLASS 1 THEN APPLY A THIN LAYER OF OIL / CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MIL-C-23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS
- 4) TOLERANCES: X.X = $\pm 0.1"$ / $\pm 1"$
X.XX = $\pm 0.01"$ / $\pm 0.5"$
X.XXX = $\pm 0.005"$ / $\pm 0.1"$
X.XXXX = $\pm 0.0005"$ / $\pm 0.05"$
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = $\pm 0.005"$
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFICATION: N/A
- 7) ASSEMBLE AS SHOWN
- 8) REMOVE ALL WELD SPATTERS
- 9) THE TOOL ASSY MUST BE PACKAGED WITH A DESICCANT BAG INTO A TIGHT FITTING SEALED PLASTIC BAG

B	HEAT TREAT ON PAGE 1 REMOVED ITEM -2 HEAT TREAT 48-52 Rc ADDED ITEM -1 MATERIAL 4140 CHANGED FOR 4140 (28-32 Rc)	19-813	VM
A	NEW ISSUE		VM
REV.	DESCRIPTION	ECN #	BY
DESIGN DRAWN	VM VM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	TOOL PART #	REV. B
MFG. APPR.	JFC	RB6872533	SHEET 1 OF 3
APPROVED	WJP	TITLE	SCALE
DATE	2019-07-10	WRENCH AND HOLDER INST/REM COMPRESSOR TIE BOLT	NTS
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RB6872533-1 HANDLE



NOTES:

1) MATERIAL: 4140 (28-32 RC)

2) HEAT TREAT: N/A

3) FINISH: N/A

4) TOLERANCES: X.X = ± 0.1 " / $\pm 1^\circ$

X.XX = ± 0.01 " / $\pm 0.5^\circ$

X.XXX = ± 0.005 " / $\pm 0.1^\circ$

X.XXXX = ± 0.0005 " / $\pm 0.05^\circ$

PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = ± 0.005 "

5) UNITS: INCHES UNLESS OTHERWISE NOTED

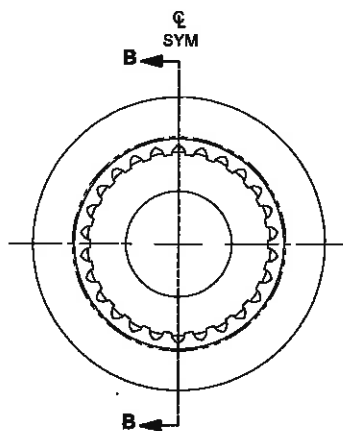
6) REMOVE ALL SHARP EDGES AND BURRS

7) IDENTIFICATION: MACHINE ENGRAVE OR DOT MARK T/N, "RB6872533", AS SHOWN

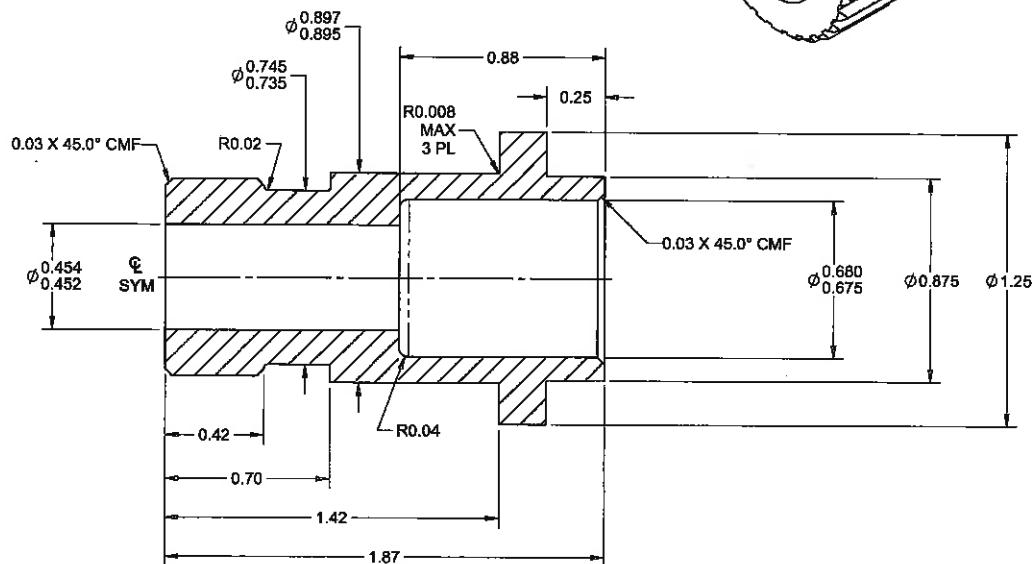
DESIGN		VM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA TOOL PART # RB6872533 TITLE WRENCH AND HOLDER INSTREM COMPRESSOR TIE BOLT SCALE NTS SHEET 2 OF 3 REV. B COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.
DRAWN		VM	
CHECKED		ML	
MFG. APPR.		JFS	
APPROVED			
DATE		2019-07-10	

SPLINE INFO:

32/64 PITCH 26 TEETH
 PRESSURE ANGLE : 30.0°
 ARC TOOTH THICKNESS : 0.0441" +0/-0.002"
 ROOT DIA : 0.762"
 PITCH DIA : 0.8125"
 OUTSIDE DIA : 0.844 +0/-0.005"
 BASE CIRCLE DIA : 0.7036
 DIMENSION OVER TWO 0.0540" DIA PINS : 0.8805 +0/-0.0033



RB6872533-2 WRENCH



SECTION B-B

NOTES:

- 1) MATERIAL: Q1
- 2) HEAT TREAT: 48-52 Rc
- 3) FINISH: N/A
- 4) TOLERANCES: XX = +/- 0.1" / +/- 1"
 X.XX = +/- 0.01" / +/- 0.5"
 X.XXX = +/- 0.005" / +/- 0.1"
 X.XXXX = +/- 0.0005" / +/- 0.05"
 PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A

DESIGN DRAWN	VM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA TOOL PART # RB6872533 TITLE WRENCH AND HOLDER INST/REM COMPRESSOR TIE BOLT SCALE NTS	REV. B SHEET 3 OF 3
CHECKED	VM		
MFG. APPR.	ML		
APPROVED	JFC		
DATE	2019-07-10	COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Entered: JK Date: Oct 30/19



NCR No. 19-7648

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

Job: <u>197092</u> Part No. <u>RB6872533-1</u> <u>REV B</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☒ Supplier Quality ☐					
Date : <u>2019-07-16</u>		Sequence #: <u>120</u>		QTY Affected : <u>2 of 2</u>			MRB (QSI042) <u>WFO</u> <u>19-07-16</u>		
Description Work Order Deviation				Disposition					
ITEM THICKNESS IS 2.76 SUPPOSED TO BE 2.50 ACCEPTABLE TO USE 2.76 THK				THIS DEVIATION IS ACCEPTABLE TO USE AS IS FIT FORM AND FUNCTION WILL BE AS ORIGINALLY INTENDED				Completed By <u>10</u> <u>89</u> JUL 16 2019 Lead hand / Supervisor <u>DAS</u> <u>30</u> <u>9-89</u> <u>19-07-16</u> QC / QA Coordinator <u>DAS</u> <u>40</u> <u>9-89</u> JUL 16 2019	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☒ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☒ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread							
		Other/Details:							